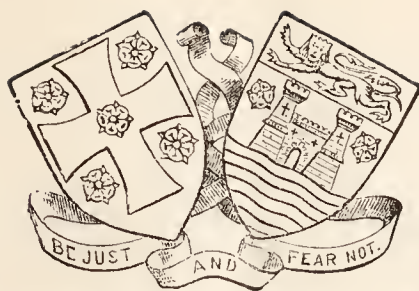


City of



Carlisle.

**HEALTH DEPARTMENT.**

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**ANNUAL REPORT**  
ON THE  
**SANITARY CONDITION**  
OF THE  
**CITY OF CARLISLE**  
*DURING THE YEAR, 1905*

(With the Annual Report of the Veterinary Inspector  
on the Inspection of Dairy Cattle within the City),

BY

**WILLIAM BROWN, F.R.C.S.E.,**  
*MEDICAL OFFICER OF HEALTH.*

**Printed by Order of the Health Committee.**

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CARLISLE.

CHAS. THURNAM AND SONS, STEAM PRINTERS, ENGLISH STREET.

1906.

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1905.

## CARLISLE URBAN DISTRICT COUNCIL.

### *Annual Report of the Medical Officer of Health.*

To the Carlisle Urban District Council.

Gentlemen,

I have the honour of submitting to you my Report on the Health of Carlisle during the year 1905, with an account of the Sanitary Work performed during the year.

#### STATISTICAL SUMMARY.

(Compared with that of 1904.)

	1905	1904
Area of District in Acres ... ..	2,029	2,029
Estimated Population ... ..	47,920	47,350
Density of Population per acre ...	23.6	23.3
Inhabited Houses (1901 census) 9,464 (1891 census) 7,624		
Rateable Value of District ... ..	£229,552	£224,683
Births ... ..	1,168	1,278
Birth-rate ... ..	24.3	26.9
Deaths ... ..	783	933
Death-rate ... ..	16.3	19.7
Zymotic Deaths ... ..	66	63
Zymotic Death-rate ... ..	1.3	1.3
Infant Mortality ... ..	163	195
Ratio of Infant Deaths to Births per 1,000 ... ..	139	152
Infectious Cases Notified ... ..	503	310
Infectious Cases Isolated at Fever Hospital ... ..	249	165

## REGISTRATION SUB-DISTRICTS.

	1905	1904
St. Mary's Sub-District—Population	27,277	26,984
St. Cuthbert's      do.                      do.	20,643	20,366

## VITAL STATISTICS.

During the year the births of 1,168 children have been registered. Of these 648 were boys and 520 girls. The total gives a rate of 24.3 per 1,000 of the population. The following is a table of birth-rates since 1874:—

1874	...	...	... No returns
1875	...	...	... 35.5
1876	...	...	... 38.6
1877	...	...	... 38.5
1878	...	...	... 38.7
1879	...	...	... 37.7
1880	...	...	... 37.0
1881	...	...	... 36.0
1882	...	...	... 35.3
1883	...	...	... 33.2
1884	...	...	... 35.0
1885	...	...	... 34.0
1886	...	...	... 33.0
1887	...	...	... 31.3
1888	...	...	... 33.5
1889	...	...	... 30.6
1890	...	...	... 30.0
1891	...	...	... 30.8
1892	...	...	... 30.5
1893	...	...	... 34.5
1894	...	...	... 32.0
1895	...	...	... 31.4
1896	...	...	... 29.6
1897	...	...	... 30.8
1898	...	...	... 30.0
1899	...	...	... 29.4

1900	...	...	...	30.1
1901	...	...	...	27.3
1902	...	...	...	27.0
1903	...	...	...	28.4
1904	...	...	...	26.9
1905	...	...	...	24.3

It will be observed that the birth-rate has been markedly declining for the last five years, and the birth-rate for the past year is the lowest on record.

### MORTAL STATISTICS.

During the past year 783 deaths were registered in the Carlisle Urban District. This number includes 424 males and 359 females. The death-rate is equal to 16.3 per 1,000 of the population, as compared with 19.7 per 1,000 in 1904, when 933 deaths were registered. Thirteen deaths belonging to the district occurred in a Public Institution (Garlands Asylum) outside the City, while 37 deaths not belonging to the district occurred in Public Institutions and Nurses' Homes within the City. After making allowance for these deaths a nett death-rate of 15.8 is obtained.

Number of deaths of persons not belonging to the district in Public Institutions and Nurses' Homes inside the City:—

Cumberland Infirmary	...	...	22
Fusehill Workhouse	...	...	9
Strathclyde House	...	...	2
Fever Hospital	...	...	2
Nurses' Homes	...	...	2
			—
Total	...	...	37
			—

Number of deaths of persons belonging to the district in a Public Institution outside the City:—

Garlands Asylum	...	...	13
-----------------	-----	-----	----



Table showing the death rate of Carlisle from 1874 to 1905 inclusive :—

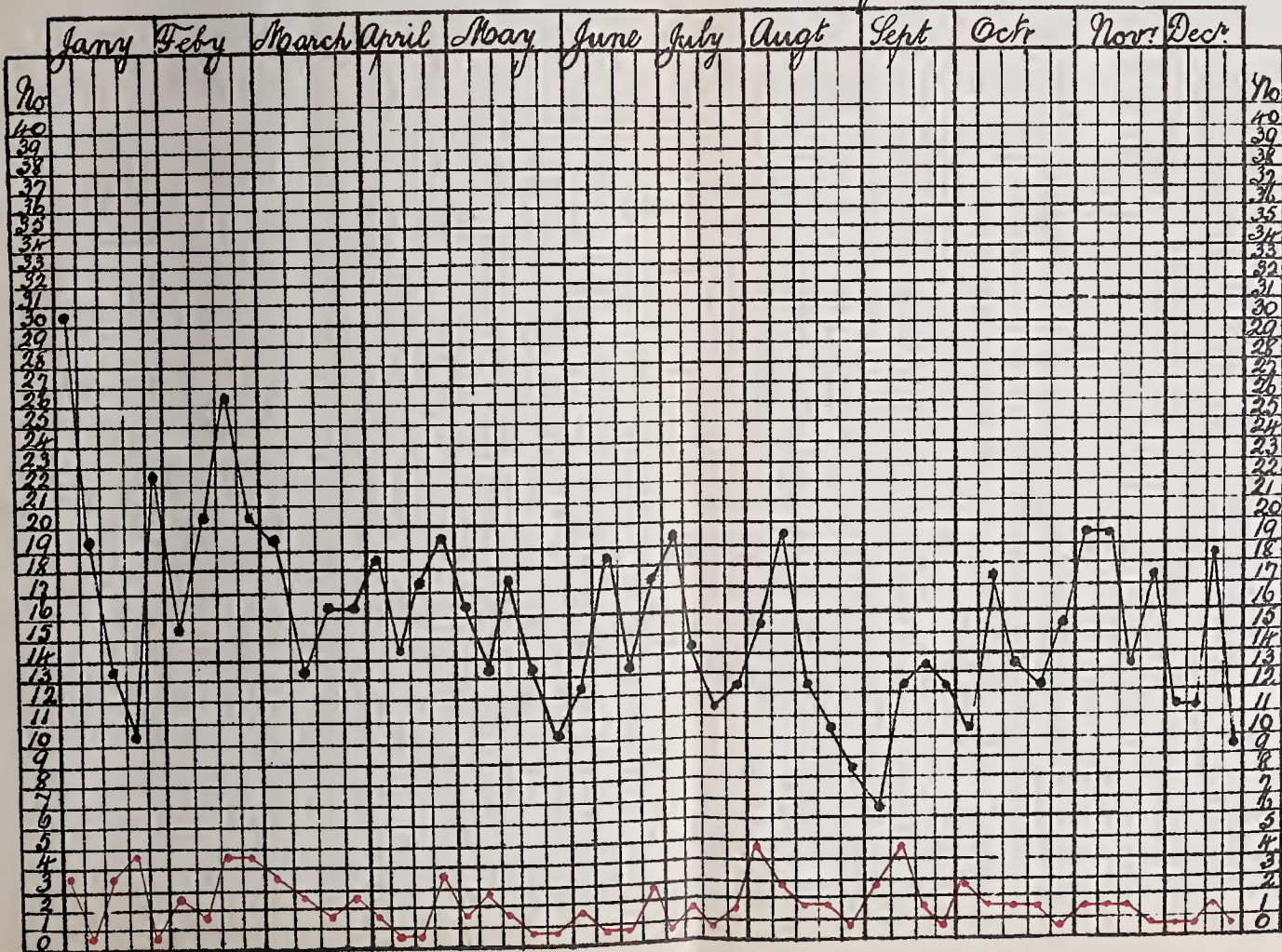
Year.	Deaths from all causes.		Deaths from Principal Zymotic Diseases.	
	No. Registered.	Rate per 1000 of Population.	No. Registered.	Rate per 1000 of Population.
1874	1055	32·6	367	11·3
1875	934	29·2	201	6·3
1876	800	25·0	100	3·0
1877	750	23·0	55	1·7
1878	828	23·5	83	2·3
1879	818	23·5	76	2·0
1880	777	22·2	106	3·0
1881	717	20·0	67	1·8
1882	852	23·6	189	5·0
1883	779	21·0	67	1·8
1884	783	21·0	38	1·0
1885	769	20·3	66	1·7
1886	745	19·4	62	1·6
1887	772	19·9	75	1·9
1888	722	18·5	59	1·5
1889	723	18·1	69	1·7
1890	792	19·5	65	1·6
1891	789	20·1	63	1·6
1892	805	20·2	55	1·3
1893	868	21·6	145	3·6
1894	780	19·2	44	1·1
1895	794	19·4	33	0·8
1896	753	18·2	30	0·7
1897	811	19·4	54	1·3
1898	935	22·2	103	2·4
1899	818	19·2	42	0·9
1900	807	18·8	60	1·4
1901	810	17·8	64	1·4
1902	856	18·5	82	1·7
1903	813	17·4	58	1·2
1904	933	19·7	63	1·3
1905	783	16·3	66	1·3


It will be noticed that the death rate from all causes for the past year (16·3) is the lowest on record for Carlisle.

Chart

Weekly deaths from all causes — Black.

do do zymotic Red.  
in the Urban District of Carlisle.





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## DEATHS FROM THE EIGHT PRINCIPAL ZYMOTIC DISEASES.

The Returns show 66 deaths from the principal Zymotic diseases, thus giving a zymotic death-rate of 1.3 per 1,000 of the estimated population, the number registered from each zymotic disease being as follows:—

Smallpox	...	...	...	0
Measles	...	...	...	17
Scarlet Fever	...	...	...	5
Diphtheria	...	...	...	6
Whooping Cough	...	...	...	11
Typhus Fever	...	...	...	5
Enteric Fever	...	...	...	3
Diarrhœa and Dysentry	...	...	...	19
Total				66

## INFANT MORTALITY.

During 1905, 163 infants under one year of age have died within the City, the ratio of infant deaths to births being 139 per 1,000, as compared with 152 per 1,000 in 1904. The following are the yearly rates since 1885:—

	Infants deaths per 1,000 births.			
1905	...	...	...	139
1904	...	...	...	152
1903	...	...	...	118
1902	...	...	...	117
1901	...	...	...	129
1900	...	...	...	134
1899	...	...	...	145
1898	...	...	...	183
1897	...	...	...	134
1896	...	...	...	137
1895	...	...	...	142
1894	...	...	...	133
1893	...	...	...	178
1892	...	...	...	123

				Infants deaths per 1,000 births.
1891	...	...	...	137
1890	...	...	...	150
1889	...	...	...	142
1888	...	...	...	129
1887	...	...	...	141
1886	...	...	...	146
1885	...	...	...	164

### MEASLES.

Seventeen deaths have occurred during the past year from this disease, as compared with 7 in 1904. The mortality from Measles during the past 20 years has been as follows:—

1886	...	...	...	4
1887	...	...	...	16
1888	...	...	...	3
1889	...	...	...	44
1890	...	...	...	1
1891	...	...	...	22
1892	...	...	...	3
1893	...	...	...	77
1894	...	...	...	20
1895	...	...	...	5
1896	...	...	...	1
1897	...	...	...	1
1898	...	...	...	59
1899	...	...	...	5
1900	...	...	...	13
1901	...	...	...	5
1902	...	...	...	10
1903	...	...	...	3
1904	...	...	...	7
1905	...	...	...	17

In consequence of the prevalence of Measles the following schools were closed, viz:—St. John's (Infants), Fawcett's (Infants), Brook Street (Infants), and Robert Ferguson's (Infants), for periods varying from 3 to 5 weeks.

## TYPHOID FEVER.

There have been 7 cases of Typhoid Fever notified during the year. The following table shows the number of Typhoid Fever cases notified each year since the Notification Act was adopted :—

1890	...	...	...	21
1891	...	...	...	18
1892	...	...	...	32
1893	...	...	...	20
1894	...	...	...	15
1895	...	...	...	20
1896	...	...	...	13
1897	...	...	...	19
1898	...	...	...	22
1899	...	...	...	19
1900	...	...	...	7
1901	...	...	...	19
1902	...	...	...	16
1903	...	...	...	6
1904	...	...	...	15
1905	...	...	...	7

It is to be noted that 3 cases notified Typhoid Fever during the past year were probably cases of Typhus Fever.

### *Tabular Statement of Cases of Typhoid Fever during the year 1905, with action taken thereon.*

Date.	Locality.	Insanitary conditions present and action taken.	Result.
1905.			
3rd Mar.	Lindisfarne Street	Removed to Crozier Lodge. Instructions given as to disinfection.	One case
9th „	Rigg Street	Do.	One extension
17th „	Lindisfarne Street	Do.	One case
15th April	Monkscluse Road	Do.	No extension
17th „	Lowther Street	Do.	do.
15th July	John's Place, Milbourne Street	Do.	do.
18th Aug.	Nelson Street	Instructions given as to disinfection.	do.

The cases of Enteric at Lindisfarne Street were found to be the result of imported infection from Liverpool. The source of infection was a female relative of the patients, who had been treated in Liverpool Hospital for Enteric, and came to stay at this house during her convalescence.

### TYPHUS FEVER.

An important event in the Sanitary Record of the year has been an outbreak of Typhus Fever after an absence of that disease from Carlisle for a period of 13 years. It may here be of interest to review the various outbreaks of Typhus Fever which have taken place in Carlisle since the present Sanitary Authority came into operation in 1874. During the first year of the present Sanitary Administration Typhus Fever existed in Carlisle in epidemic proportions. Mr. W. H. Power (now Principal Medical Officer to the Local Government Board), who made a medical inspection of Carlisle in 1874, estimated that from April of that year, when Typhus began, to the end of September, there had been 680 cases of Typhus Fever in Carlisle of which 68 proved fatal. The outbreak in 1874 terminated in 1876, and during the two years, 1874 and 1875, there were no fewer than 144 deaths from Typhus Fever, representing some 1,440 cases of disease. This fact gives us some conception of the highly infectious character of Typhus Fever. From 1876 to 1885, a period of 9 years, Carlisle was free from Typhus, but in the latter year it made its appearance in Rigg Street, and from there it was conveyed into Queen Street. This outbreak resulted in 7 cases. Two years subsequently 11 cases occurred, the following streets being invaded—Caldcotes, Scott Street, Burns Street, and Bridge Lane. Then came the outbreak of 1892 in Finkle Street, Castle Lane, and Annetwell Street, when 16 persons caught the disease.

Lastly comes the outbreak of the past year the particulars of which are embraced in the following table:—



No. of Case.	Date of Notification.	Whether Notified Typhus or Otherwise.	Name (Initials).	Age.	Sex,	Occupation.	Locality.	Isolation.
1	1905. April 19th	...	J. G.	Years. 17	Male.	Telegraph Messenger	Monkclose Road	Crozier Lodge
2	" 29th	...	J. S.	19	Do.	Mail Sorter & Telegraphist	Barrock Street	Do.
3	May 10th	...	K. M.	55	Female.	At the Nurseries, Knowefield	3 Rigg Street	Do.
4	June 27th	Typhoid	M. M'S.	19	Do.	At Carr's	5 Shakespeare Street	Do.
5	" 29th	Do.	M. O'B.	22	Do.	Hawker	53 Rigg Street	Do.
6	" 29th	Do.	M. M'S.	42	Do.	Housewife	5 Shakespeare Street	Do.
7	July 12th	...	E. O'B.	6	Do.	...	53 Rigg Street	Do.
8	" 25th	...	J. M'S.	14	Male.	At Carr's	5 Shakespeare Street	Do.
9	" 30th	...	M. D.	45	Female.	Housewife	7 Do. do.	Do.
10	Aug. 9th	...	T. S. D.	54	Male.	Painter	7 Do. do.	Do.
11	Sept. 21st	...	E. D.	12	Female.	School Girl	Milbourne Street	Do.
12	" 21st	...	N. D.	10	Do.	Do.	Peter Street	Do.
13	" 22nd	...	M. G.	15	Do.	At Teasdale's Factory	Byron Street	Do.
14	" 23rd	...	M. D.	8	Do.	School Girl	Milbourne Street	Do.
15	Oct. 3rd	...	I. C.	31	Do.	Housewife	Do.	Do.
16	" 13th	...	S. G.	10	Male.	School Boy	Byron Street	Do.

It will be seen from the foregoing tabulation that from April 19th to October 13th, there were notified in the Carlisle Urban Sanitary District 16 cases of fever, which number coincides with the Typhus Fever cases recorded during the last outbreak 13 years ago. It may be mentioned that there were 3 other cases which, though notified Typhoid Fever, were all probably cases of Typhus, and also that 3 cases of Typhus in the Rural District were importations from the house, 7 Shakespeare Street, Caldewgate. In all the outbreaks of Typhus Fever from 1874, the first cases of the disease have been mistaken for cases of Typhoid Fever, and this is not to be wondered at when we take into consideration the close similarity in symptoms presented by Typhoid and Typhus in their early stages. In the outbreak of the past year the difficulty in diagnosis appears to have been greater than usual.

As to whether Typhus Fever originates spontaneously or from some pre-existing case has always been a matter of dispute. There are several circumstances in connection with the Carlisle outbreaks which favour the *de novo* theory of origin. In none of the various outbreaks in Carlisle for the last 31 years, has its origin from any pre-existing case been traced satisfactorily. All the outbreaks have commenced in a limited area occupied by the old house property in Caldewgate, and a similar kind of property in the adjacent district situate in the immediate vicinity of the Carlisle Castle. All the outbreaks have commenced in the early part of the year, and with one exception about the same month, viz., the month of April. It is curious to note that this April occurrence attended the great epidemic of Typhus in Carlisle in 1781, so graphically described by Dr. Heysham, when some 600 persons were attacked, representing 1 in 11 of the then population of the City. Lastly, the Irish element of the population has always been the first invaded. These facts

tend to show that for the production of Typhus Fever, local conditions, race characteristics, and seasonal influence are factors of importance. Such points have more than a speculative interest.

The Typhus outbreak necessarily caused much extra work, and during the prevalence I paid some 120 visits to infected houses and contacts.

### SCARLET FEVER.

Scarlet Fever has been very prevalent during the year, 378 cases having been notified as compared with 180 in 1904. The following table gives the School incidence of Scarlet Fever for 1904 and 1905:—

				1905	1904
Ashley Street Schools	...	...	35	...	7
Brook Street	do.	...	31	...	18
Caldewgate	do.	...	26	...	3
St. Stephen's	do.	...	23	...	0
S. John's	do.	...	23	...	17
Fawcett	do.	...	20	...	15
Bishop Goodwin	do.	...	18	...	8
Lowther Street	do.	...	14	...	7
Christ Church	do.	...	11	...	15
Holy Trinity	do.	...	8	...	4
St. Patrick's	do.	...	7	...	1
St. Cuthbert's	do.	...	4	..	9
St. Bede's	do.	...	3	...	2
Denton Holme	do.	...	3	...	5
Higher Grade	do.	...	1	...	0
Botcherby	do.	...	0	...	6
Grammar School	...	...	0	...	2
Private Schools	...	...	4	...	6
No School	...	...	147	...	55
				<hr/>	<hr/>
Totals	...	...	378	...	180
				<hr/>	<hr/>

Table showing the number of cases of Scarlet fever during the year 1905 arranged as to age :—

Under 1 year	...	...	...	6
From 1 to 2 years	...	...	...	14
„ 2 „ 3 „	...	...	...	27
„ 3 „ 4 „	...	...	...	33
„ 4 „ 5 „	...	...	...	30
„ 5 „ 6 „	...	...	...	51
„ 6 „ 7 „	...	...	...	39
„ 7 „ 8 „	...	...	...	37
„ 8 „ 9 „	...	...	...	24
„ 9 „ 10 „	...	...	...	25
„ 10 „ 11 „	...	...	...	11
„ 11 „ 12 „	...	...	...	15
„ 12 „ 13 „	...	...	...	15
„ 13 „ 14 „	...	...	...	9
„ 14 „ 15 „	...	...	...	3
„ 15 „ 16 „	...	...	...	5
„ 16 „ 17 „	...	...	...	3
„ 17 „ 18 „	...	...	...	4
„ 18 „ 19 „	...	...	...	1
„ 19 „ 20 „	...	...	...	1
Over 20 years	...	...	...	25
Total				378

Number of cases of Scarlet Fever reported each week from January 1st to December 31st, 1905 :—

	January 1s to	7th	...	...	6
Week	ending	January 14th	...	...	6
„	„	„ 21st	...	...	8
„	„	„ 28th	...	...	6
„	„	February 4th	...	...	5
„	„	„ 11th	...	...	5
„	„	„ 18th	...	...	2
„	„	„ 25th	...	...	4



Week	ending	March	4th	...	...	5
„	„	„	11th	...	...	8
„	„	„	18th	...	...	4
„	„	„	25th	...	...	10
„	„	April	1st	...	...	8
„	„	„	8th	...	...	4
„	„	„	15th	...	...	13
„	„	„	22nd	...	...	7
„	„	„	29th	...	...	6
„	„	May	6th	...	...	4
„	„	„	13th	...	...	11
„	„	„	20th	...	...	2
„	„	„	27th	...	...	7
„	„	June	3rd	...	...	3
„	„	„	10th	...	...	6
„	„	„	17th	...	...	6
„	„	„	24th	...	...	13
„	„	July	1st	...	...	9
„	„	„	8th	...	...	4
„	„	„	15th	...	...	5
„	„	„	22nd	...	...	3
„	„	„	29th	...	...	9
„	„	August	5th	...	...	4
„	„	„	12th	...	...	5
„	„	„	19th	...	...	7
„	„	„	26th	...	...	8
„	„	September	2nd	...	...	9
„	„	„	9th	...	...	11
„	„	„	16th	...	...	5
„	„	„	23rd	...	...	11
„	„	„	30th	...	...	14
„	„	October	7th	...	...	8
„	„	„	14th	...	...	7
„	„	„	21st	...	...	5
„	„	„	28th	...	...	13
„	„	November	4th	...	...	12
„	„	„	11th	...	...	5

Week	ending	November	18th	...	...	12
„	„	„	25th	...	...	12
„	„	December	2nd	...	...	9
„	„	„	9th	...	...	7
„	„	„	16th	...	...	12
„	„	„	23rd	...	...	8
„	„	„	30th	...	...	5
Total						378

The case mortality from the disease has been 1.3 per cent., as compared with 1.6 per cent. last year, and 4.9 in 1903.

The number of cases isolated at Crozier Lodge during the year has been 213, at the rate of 56 per cent. of the notified cases. In former reports I referred to the question as to the advisability of the Sanitary Authority isolating so many cases of Scarlet Fever at Crozier Lodge, and this subject is one which deserves the attention of the Carlisle Authority. For more than twenty years I have maintained that the present system of isolating cases of Scarlet Fever is of very doubtful benefit in reducing either the prevalence or mortality of Scarlet Fever, and any good obtained therefrom is not at all commensurate with the cost involved, which, during the past year, has been approximately £1,920. On several occasions during the year the accommodation at Crozier Lodge for infectious cases, other than Scarlet Fever, has been severely overtaxed in consequence of the large number of cases of Scarlet Fever isolated there. Ten years ago much difficulty was experienced in persuading people to allow cases of Scarlet Fever being isolated at the Fever Hospital, even when there was urgent necessity for removal. Now, in the present day period of reliance upon external aid, the difficulty is confined to advising the isolation of cases at home when hospital isolation is uncalled for. I fear that people are now beginning to

look upon the Fever Hospital as a charitable institution for the maintenance of their families, the primary object of the hospital being regarded by them as a matter of secondary consideration.

### DIPHTHERIA.

During the past year there has been a decided decrease in the number of cases of Diphtheria, 25 cases being notified as compared with 39 in the previous year. The comparative School Incidence for the years 1903, 1904, and 1905, is shown below:—

		1903		1904		1905
Denton Holme Schools	...	5	...	2	...	0
Ashley Street Schools	...	6	...	2	...	0
Brook Street Schools	...	1	...	0	...	2
Fawcett Schools	...	2	...	1	...	4
St. John's Schools	...	3	...	1	...	2
Kendal Street Schools	...	5	...	2	...	1
Christ Church Schools	...	2	...	3	...	0
St. Bede's Schools	...	1	...	0	...	0
St. Cuthbert's Schools	...	1	...	2	...	2
Higher Grade Schools	...	0	...	0	...	0
Lowther Street Schools	...	1	...	0	...	0
St. Stephen's Schools	...	0	...	0	...	0
Goodwin Schools	...	1	...	3	...	1
Botcherby Schools	...	2	...	0	...	0
Holy Trinity Schools	..	0	...	1	...	0
Cathedral School	...	0	...	0	...	1
Private Schools	...	3	...	0	...	0
No School	...	35	...	22	...	12
		<hr/>				
Totals	...	68	...	39	...	25
		<hr/>				

CASE MORTALITY—The case mortality from the disease is 24 per cent., as compared with 35.8 per cent. in 1904.

*Tabular Statement of Cases of Diphtheria during the year  
1905, with the action taken thereon.*

Date.	Locality.	Insanitary conditions present, and action taken.	Result.
1905.			
Jan. 5th	Beaconsfield Street	Removed to Crozier Lodge. In- structions given as to disinfection	One case
„ 13th	Sheffield Street	Do.	No extension do.
„ 14th	Junction Street	Not Removed. Instructions given as to disinfection	do.
„ 27th	Nelson Street	Removed to Crozier Lodge. In- structions given as to disinfection	do.
„ 31st	London Road	Instructions given as to disinfection	do.
Mar. 9th	Drover's Lane	Removed to Crozier Lodge. In- structions given as to disinfection	do.
„ 31st	Corporation Road	Instructions given as to disinfection	do.
May 11th	Old Greystone	Removed to Crozier Lodge. In- structions given as to disinfection	do.
„ 14th	Union Street	Do.	do.
„ 15th	Regent Terrace	Do.	do.
„ 19th	Caldew Bridge	Do.	do.
„ 20th	Loughran's Lane, Rickergate	Instructions given as to disinfection	do.
„ 29th	Married Quarters, The Castle	Removed to Crozier Lodge. In- structions given as to disinfection	do.
June 2nd	Flower Street	Instructions given as to disinfection	do.
„ 9th	Castle Street	Do.	do.
„ 14th	Oswald Street	Removed to Crozier Lodge. In- structions given as to disinfection	do.
July 5th	Charlotte Street	Instructions given as to disinfection	do.
„ 18th	Harrison Street	Removed to Crozier Lodge. In- structions given as to disinfection	do.
Aug. 14th	Wool Pack Lane, Milbourne Street	Do.	do.
„ 23rd	The Lodge, Fever Hospital	Do.	do.
„ 28th	Union Street	Do.	do.
Oct. 5th	Warwick Road	Instructions given as to disinfection	do.
„ 30th	Carlisle Square, Blackfriars Street	Removed to Crozier Lodge. In- structions given as to disinfection	do.
Nov. 2nd	Sheffield Street	Instructions given as to disinfection	do.
„ 4th	Port Road	Do.	do.



## PULMONARY PHTHISIS, TABES MESENTERICA AND TUBERCULAR MENINGITIC.

The following table gives the number of notifications sent by Parochial Surgeons and Medical Superintendents of Public Institutions, according to the arrangements made about six years ago :—

Date.	Sex.	Address.	Name of Disease.
1905.			
Jan. 12th	Female	Boyd's Court, Rigg Street ... ..	Pulmonary Tuberculosis
„ 14th	Male	10 Rigg Street ... ..	Pulmonary Phthisis
„ 17th	Female	White's Court, South Street ... ..	Pulmonary Tuberculosis
„ 17th	Do.	2 Bird-in-Hand Lane, Castle Street...	Do.
„ 17th	Male	25 Harold Street ... ..	Do.
„ 17th	Female	31 Collingwood Street ... ..	Do.
„ 17th	Male	3 Milbourne street .. ..	Do.
„ 17th	Female	1 Hilton's Court, Crosby Street ... ..	Do.
„ 19th	Do.	7 Denton Place, Denton Crescent ... ..	Do.
„ 21st	Male	13 Wilson Street ... ..	Do.
„ 21st	Female	31 Water Street .. ..	Do.
„ 21st	Male	1 Scott Street ... ..	Phthisis
„ 23rd	Do.	21 Duke Street ... ..	Do.
„ 25th	Do.	4 Walsh's Court, Lord Street ... ..	Pulmonary Tuberculosis
„ 27th	Do.	19 Solway Terrace ... ..	Do.
„ 30th	Female	70 Oswald Street ... ..	Do.
„ 30th	Do.	Swift's Row, George Street ... ..	Do.
„ 30th	Male	14 Scott Street ... ..	Tabes Mesenterica
Feb. 1st	Do.	14 Burn's Street ... ..	Phthisis
„ 3rd	Do.	38 Sybil Street .. ..	Pulmonary Tuberculosis
„ 3rd	Female	29 Water Street ... ..	Do.
„ 14th	Male	Cumming's Court, Church Street ... ..	Do.
„ 23rd	Female	19 Cumberland Street .. ..	Do.
„ 23rd	Male	88 Harrison Street ... ..	Do.
Mar. 9th	Female	4 Old Greystone Road ... ..	Do.
„ 23rd	Do.	18 Crescent Place, Denton Crescent...	Do.
„ 31st	Do.	33 East Norfolk Street ... ..	Do.
Apr. 5th	Male	2 Beta Court, William Street ... ..	Do.
„ 19th	Do.	17 Hope's Court, Port Road ... ..	Do.
„ 19th	Do.	8 Collier Lane ... ..	Do.
May 5th	Do.	21 Sheffield Street ... ..	Do.
„ 10th	Do.	4 Bush Lane ... ..	Do.
„ 10th	Do.	14 Broadguards ... ..	Do.
„ 22nd	Do.	3 Silloth Street ... ..	Do.
June 3rd	Do.	26 East Street ... ..	Do.
„ 6th	Do.	16 Union Street ... ..	Do.
„ 27th	Female	4 Old Bowman Street... ..	Do.
„ 28th	Male	42 Shaddongate ... ..	Do.
„ 28th	Do.	45 Linton Street ... ..	Do.
„ 29th	Do.	Thompson's Court, Crown Street .. ..	Tabes Mesenterica
„ 29th	Do.	42 Alexander Street ... ..	Pulmonary Tuberculosis

Date.	Sex.	Address.	Name of Disease.
1905.			
July 5th	Female	Shady Grove, Newtown ... ..	Pulmonary Tuberculosis
" 5th	Do.	33 Cumberland Street ... ..	Tabes Mesenterica
" 5th	Do.	1 Chapel Row ... ..	Tubercular Meningitis
" 10th	Male	7 Bread Street ... ..	Pulmonary Tuberculosis
" 10th	Female	5 Wilkin's Court, John Street ... ..	Do.
" 10th	Do.	23 Garfield Street ... ..	Do.
" 18th	Do.	20 Slack's Court, Milbourne Street ... ..	Do.
" 19th	Male	51 Linton Street ... ..	Do.
" 19th	Do.	4 Rosemary Lane ... ..	Do.
" 20th	Do.	55 King Street ... ..	Do.
" 22nd	Female	62 Charles Street ... ..	Do.
" 25th	Male	4 Shakespeare Street ... ..	Do.
Aug. 5th	Do.	Dacre Street, Corporation Road ... ..	Do.
" 28th	Female	25 Thompson Street ... ..	Tubercular Meningitis
" 28th	Do.	1 Heighton Place, Charlotte Street ..	Pulmonary Tuberculosis
Sept. 1st	Male	4 Shakespeare Street ... ..	Phthisis Pulmonalis
" 18th	Do.	Rayson's Court, South John Street ...	Pulmonary Tuberculosis
" 19th	Do.	6 Milton Street ... ..	Tabes Mesenterica
" 27th	Do.	34 Union Street ... ..	Pulmonary Tuberculosis
Oct. 24th	Female	31 Bread Street ... ..	Pulmonary Phthisis
" 27th	Do.	4 Dacre Street, Corporation Road ...	Tabes Mesenterica
" 30th	Do.	Randall Court, Randall Street ...	Pulmonary Tuberculosis
Nov. 7th	Do.	3 Chamber's Court, Bridge Street ..	Do.
Dec. 11th	Male	13 East Street ... ..	Do.
" 15th	Female	Peascod's Lane, English Street ...	Do.
" 20th	Male	10 Peel Street, Newtown ..	Do.
" 29th	Female	31 Bread Street ... ..	Do.

## NOTIFICATION OF INFECTIOUS DISEASES.

There has been an increase in the number of Infectious Diseases notified during the year, 503 cases having been notified, as compared with 310 cases last year, 1904. In every case detailed enquiries were made according to printed instructions.

The following table shows the number of notifications to the Sanitary Authority during the year of each disease specified in the Infectious Diseases Notification Act:—

Nature of Infectious Disease.	Number of Notifications sent in during				Totals.
	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	
Small Pox ... ..	0	0	0	0	0
Diphtheria ... ..	7	9	5	4	25
Membranous Croup ...	0	0	0	0	0
Erysipelas ... ..	22	20	16	15	73
Scarlet Fever ... ..	71	96	91	120	378
Typhoid or Enteric Fever	3	2	2	0	7
Typhus Fever ... ..	0	6	8	2	16
Relapsing Fever ... ..	0	0	0	0	0
Continued Fever ... ..	0	0	0	0	0
Puerperal Fever .. ..	0	2	2	0	4
Totals ... ..	103	135	124	141	503

ISOLATION OF INFECTIOUS DISEASES.

The Sanitary Authority have isolated at Crozier Lodge 249 cases of Infectious Diseases during the year, viz.:—213 cases of Scarlet Fever, 16 of Typhus Fever, 14 of Diphtheria, and 6 of Typhoid Fever.

CLOSURE OF SCHOOLS.

In consequence of the prevalence of Measles, four schools were closed during the year for the periods of three to five weeks.

The following Table shows the schools closed, and the period of closure :—

SCHOOL.	PERIOD.
St. John's (Infant's) ... ..	Three Weeks.
Garrison Children attending Fawcett Schools ...	Five „
Fawcett's School (Infant's)... ..	Three „
Brook Street (Infant's) ... ..	Five „
Robert Ferguson (Infant's)... ..	Four „



## EXAMINATION OF CHILDREN AS TO FREEDOM FROM INFECTIOUS DISEASE.

Among the many duties imposed upon the Medical Officer of Health by the Carlisle Corporation Act, 1904, is one which relates to the granting of certificates as to freedom of school children from infectious disease. The section [43] referred to is as follows:—

“No person being the parent or having the care or charge of a child who is or has been suffering from an infectious disease shall, after a notice from the Medical Officer that the child is not to be sent to school, permit such child to attend school without having procured from the Medical Officer a certificate (which shall be granted free of charge upon application) that in his opinion such child may attend without undue risk of communicating such disease to others.”

The carrying out of this new provision has entailed a great amount of extra work, and some 193 examinations have been made in connection with the new duty, and 193 certificates granted.

## VISITS PAID IN CONNECTION WITH INFECTIOUS DISEASES GENERALLY.

During the year I have paid nearly 500 visits to infected houses.

## HOSPITAL ACCOMMODATION.

The plans for the proposed Smallpox Hospital at the Reservoir Gardens, Belle Vue, at an estimated cost of £3,622, were submitted to Dr. E. Petronel Manby, of the Local Government Board, at a meeting held in Carlisle in June last, and the plans with some slight modifications have been approved of, and an application to borrow a sum of £3,687 for the revised work has been granted by the Local Government Board. The site of the hospital is on an elevated situation, a little over two miles from Carlisle, and has an area of 14 acres. The plans are for a per-



manent brick pavilion containing two wards for four beds each, provision being made for an extension of the hospital in the event of further accommodation being required. The administrative block will have on the ground floor caretaker's room, medical officer's room, nurses' room, kitchen, pantry, linen store, and scullery. The first floor will have five bedrooms with bath room and water closet. The top floor contains four attic bedrooms. The out-buildings consist of a wash house, ironing room, coal house, and a water closet. The mortuary will be in a separate block. There will be an ambulance house, and a covered shed for private conveyances. The sewage is disposed of by a septic tank, 10 feet square and 6 feet deep, the effluent being run over land to the south of the site.

#### MEAT INSPECTION.

During the year 145 examinations of diseased carcasses have been made, as compared with 153 in 1904, and 99 in 1903.

The following table gives particulars of the carcasses examined:—

Animal.				Number of Examina- tions.	Whole pronounced unfit for food.	Portions pronounced unfit for food.	Number affected with Tuber- culosis.
Oxen	...	...	...	74	36	38	57
Sheep	...	...	...	49	37	12	...
Goats	...	...	...	...	...	...	...
Calves	...	...	...	1	1	...	...
Pigs	...	...	...	21	19	2	7
Totals	...	...	...	145	93	52	64

## THE WATER SUPPLY.

The water supply has been abundant, and of good quality during the year. The following is a report from the City Analyst of a sample of Carlisle water obtained from a tap at the new municipal offices in December last:—

“Report on the Chemical Analysis of a sample of water received from Dr. Brown, Carlisle, December, 1905.

Physical Properties—Bright and clear, tasteless and odorless, no sediment, neutral reaction.

### Chemical Analysis.

Free Ammonia	...	·0014 grains per gallon.
Albuminoid do.	...	·00385 „ „
Chlorine (as Chlorides)		·7 „ „
Nitrates (NO. <sub>3</sub> )	...	·2 „ „
Nitrites	...	none
Hardness, Temporary		2° Clarke's scale.
Permanent		4·5°
Total	...	6·5°

Equal to 5·5 grains of carbonate of calcium per gallon.

Oxygen absorbed ·168 grains per gallon.

Microscopical examination revealed nothing indicating pollution.

Opinion and Remarks:—This is a sample of good water. The amount of organic matter is rather large—about  $2\frac{1}{2}$  grains per gallon—but as it is probably vegetable this amount is not very excessive. Apart from the somewhat high amount of organic matter the water is of excellent quality. The degree of hardness is a very suitable one for a domestic water.

(Signed) T. HATFIELD WALKER,  
City Analyst.”

Conyer's House,  
Newcastle-on-Tyne,  
December 8th, 1905.

As reported last year the work for bringing the new water supply from Geltsdale commenced in September, 1904. The works, consisting of about 12 miles of piping, construction of filter beds, and water tank at Geltsdale, and a service reservoir at Cumwhinton, have been completed. The contract for the large storage reservoir at Geltsdale was let to Messrs. Harold Arnold & Son, Doncaster, at an estimated cost of £61,733, and the work is now in progress.

FACTORIES AND WORKSHOPS.

I have visited the following Factories during the year:—Brown, Tran & Co., London Road; Lowden's, Willow Holme; Todd's, Shaddongate; Buck's, Nelson Street; Teasdale's, Westmorland Street; Story's, Norfolk Street; Carrick's, Norfolk Street; Morton's, Lorne Crescent.

I found them all in a satisfactory condition. All the workshops have been visited during the year by the Sanitary Inspectors, and in some cases by myself. They were found to be on the whole in good condition.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories ... .. (Including Factory Laundries.)	8	...	...
Workshops ... .. (Including Workshop Laundries)	420	20	...
Workplaces ... ..	...	...	...
Homeworkers' Premises ... ..	...	..	...
TOTAL ... ..	428	20	...

## 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Pro- secutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness .. ...	12	8	...	...
Want of ventilation ... ..	1	1	...	...
Overcrowding... ..	1	1	...	..
Want of drainage of floors ...	...	...	...	...
Other nuisances .. ...	8	8	...	...
Sanitary accommodation :—				
{ 1. Insufficient ... ..	4	4	...	...
{ 2. Unsuitable or defective	4	2	1	...
{ 3. Not separate for sexes	1	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of under- ground bakehouse (s. 101) ...	1	...	1	..
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100) ... ..	7	6	2	...
Failure as regards lists of out- workers (s. 107) ... ..	...	...	...	...
Giving out work to be done in premises which are :—				
1. Unwholesome (s. 108) ...	...	..	...	...
2. Infected (s. 110) ... ..	...	...	...	...
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (s. 109) ... ..	...	...	...	...
Other offences .. ...	...	...	...	...
Total .. ...	39	30	4	...



3.—OTHER MATTERS.

Class.	Number.	
Matters notified to H.M. Inspectors of Factories :—		
Failure to affix Abstract of the Factory and Workshop Act (s. 133) ... ..	34	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (s. 5) :—		
1. Notified by H.M. Inspectors ... ..	15	
2. Reports (of action taken) sent to H.M. Inspectors ... ..	9	
Other ... ..	...	
Underground Bakehouses (s. 101) :—		
Certificates granted during the year ... ..	...	
In use at the end of the year ... ..	5	
Homework :—		
List of Outworkers (s. 107) :—		
Lists received ... ..	Lists.	Outworkers.
Addresses to outworkers :—		
1. Forwarded to other Authorities ... ..	...	
2. Received from other Authorities ... ..	...	
Homework in unwholesome or infected premises :—		
Notices prohibiting homework in unwholesome premises (s. 108) ... ..	Wearing Apparel ;	Other.
Cases of infectious diseases notified in home-workers' premises ... ..	...	...
Orders prohibiting homework in infected premises (s. 110) ... ..	...	...
Workshops on the Register (s. 131) at the end of the year		
Bakehouses ...		222
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	{	54
Total number of workshops on Register ...		276

### BAKEHOUSES.

There are 54 Bakehouses, five of which are underground bakehouses. One underground bakehouse has been closed since last year, viz.:—Stanley's, Botchergate. The five which remain are in a satisfactory condition. Mrs. Beaty's underground bakehouse has been remodelled during the year. One bakehouse in connection with the Border Café, Botchergate, hitherto looked upon as a kitchen, must now be regarded as an underground bakehouse, and dealt with accordingly.

### ICE CREAM SHOPS.

I have visited all the Ice Cream Shops during the year. Two of them were found unsatisfactory with regard to cleanliness, the others being in good condition.

### COMMON LODGING HOUSES.

The Common Lodging Houses have been regularly visited by myself and the Sanitary Inspectors during the year, and are satisfactory. One new lodging house situated in Jane Street, Willow Holme, has been registered during the year.

### COWSHEDS.

There are 22 Cowsheds in the City, situated in the following localities:—Tyne Street, Boundary Road, Millholme Terrace, Boundary Road, Currock, Old Greystone, Greystone Road, Botcherby Mill, Back Bowman Street, South Henry Street, Port Road, Silloth Street, Wigton Road, Trinity Buildings, and Newtown Farm.

With few exceptions I have visited all the above cowsheds during the year, and found them on the whole satisfactory. One cowshed in Boundary Road (Mains) was found defective in ventilation and drainage. This cowshed will be probably done away with in the spring of the present year.

A cowshed in Back Bowman Street has not a proper receptacle for the disposal of manure. The owner, however, has promised to build the required receptacle at an early date.

The Dairy Cattle within the City have been regularly inspected by the Veterinary Inspector during the whole

of the year, and his report upon bovine sickness affecting the milk is appended to this report.

### SEWAGE DISPOSAL.

The scheme for dealing with the whole of the Carlisle Sewage by the bacterial method is now finally settled. The original estimate of the works, £65,000, has been reduced to £52,500, by substituting continuous flow filter beds for double contact beds, and an application to borrow this amount has been sanctioned by the Local Government Board. The scheme provides for a pumping station, sedimentation tanks, and sixteen continuous flow circular filter beds for dealing with the crude sewage and storm water beds for four volumes of the dry weather flow. The works are to be commenced in the spring of the year.

### INSANITARY PROPERTY.

A considerable amount of insanitary property has been dealt with during the year, viz.:—

Four houses comprising ten tenements in Key's Lane, Scotch Street.

Two houses in Barley Stack Lane, Rickergate.

Three houses in Bowman's Court, Rickergate.

Seven tenements in Brewery Row, Caldewgate.

Four houses comprising five tenements in East Tower Street.

The houses in Key's Lane were closed after getting notice from the Sanitary Authority of the unfitness of the property for habitation, and the necessary alterations are being carried out. The property in Barley Stack Lane and Bowman's Court has been made habitable by the owners. In the case of the Brewery Row property nothing so far has been done, but negotiations for the desired work are at present taking place. With regard to the property in East Tower Street the necessary work has been delayed owing to the negotiations between the owner and the Carlisle Corporation for the purchase of the property having fallen through. The property will now have to be dealt with in accordance with the provisions of the Housing of the Working Classes Act.

Your obedient Servant,

WILLIAM BROWN,

Medical Officer of Health.

Carlisle, January 19th, 1906.



TABLE I.  
BIRTHS, 1905,

QUARTER ENDING.	ST. MARY.			ST. CUTHBERT.			TOTALS FOR CITY.
	Males.	Females.	Totals.	Males.	Females.	Totals.	
March 31 .....	79	76	155	78	55	133	288
June 30.....	98	80	178	57	79	136	314
September 30	94	74	168	60	71	131	299
December 31...	85	62	147	64	56	120	267
Totals.....	356	292	648	259	261	520	1168

TABLE II.  
DEATHS, 1905.

QUARTER ENDING.	ST. MARY.					ST. CUTHBERT.					TOTALS FOR CITY.
	Males.		Females.		Totals.	Males.		Females.		Totals.	
	Under 5 years	Over 5 years	Under 5 years	Over 5 years		Under 5 years	Over 5 years	Under 5 years	Over 5 years		
March 31	23	55	19	43	140	17	37	17	28	99	239
June 30	17	54	7	50	128	15	30	6	18	69	197
Sept. 30	15	20	10	37	82	16	27	14	24	81	163
Dec. 31	13	35	17	35	100	15	35	13	21	84	184
TOTALS	68	164	53	165	450	63	129	50	91	333	783



TABLE III.

Showing the number of Deaths at all ages in 1905, from certain groups of Diseases, and proportions to 1,000 of Population, and to 1,000 Deaths from all causes; also the number of Deaths of Infants under one year of age from other groups of Diseases, and proportions to 1,000 Births and to 1,000 Deaths from all causes under one year.

Division I. (Adults)	Total Deaths.	Deaths per 1000 of Population, at all ages.	Deaths per 1000 of Total Deaths at all ages.
1. Principal Zymotic Diseases ...	66	1·3	84·2
2. Pulmonary Diseases ... ..	130	2·7	166·0
3. Principal Tubercular Diseases	92	1·9	117·4
Division II. (Infants under one year).	Total Deaths.	Deaths per 1000 of Births.	Deaths per 1000 of Total Deaths under one year.
4. Wasting Diseases ... ..	46	39·3	282·2
5. Convulsive Diseases ... ..	10	8·5	61·3

- 1—Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Typhus, Enteric (or Typhoid), and Simple Continued Fevers and Diarrhoea.
- 3—Includes Phthisis, Scrofula, Tuberculosis, Rickets, and Tabes.
- 4—Includes Marasmus, Atrophy, Debility, Want of Breast Milk, and Premature Birth.
- 5—Includes Hydrocephalus, Infantile Meningitis, Convulsions and Teething.

TABLE IV.  
Table showing the Number of Deaths from the principal Zymotic Diseases in the 10 Years  
1895 to 1904, and in the year 1905.

DISEASE.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Annual Average of 10 Years 1895—1904	Proportion of Deaths to 1000 Deaths in 10 years, 1895—1904.	Total Deaths in 1905.	Proportion of Deaths to 1000 Deaths in 1905.
Smallpox .....	...	...	...	...	...	...	...	...	4	...	4	4	...	...
Measles... ..	5	1	1	59	5	13	5	10	3	7	10.9	13.0	17	21.7
Scarlet Fever .....	2	3	7	8	3	2	6	17	5	3	5.6	6.7	5	6.3
Diphtheria .....	5	3	10	9	2	3	14	41*	20	14	12.1	14.4	6	7.6
Whooping Cough.....	7	20	24	1	20	17	14	5	20	20	14.8	17.7	11	14.0
{ Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	5	6.3
{ Enteric .....	4	3	3	2	1	2	5	7	3	3	3.3	3.9	3	3.8
{ Simple continued .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea .....	10	...	9	24	11	23	20	2	3	16	11.8	14.1	19	24.2
Totals .....	33	30	54	103	42	60	64	82	58	63	58.9	70.4	66	84.2
Rate per 1000 of population.....	.8	.7	1.3	2.4	.9	1.4	1.3	1.7	1.2	1.3	1.2	...	1.3	...

\* Includes Membranous Croup.

TABLE V.

Vital Statistics of whole District during 1905 and previous years.

YEAR.	Population estimated to Middle of each Year	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT.	Deaths of Non- residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT	
		Number.	Rate.*	UNDER ONE YEAR OF AGE.		AT ALL AGES.					Number.	Rate.*
				Number.	Rate per 1,000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1895	41,658	1311	31·4	186	142	794	19·0	123	30	No information. 13 7 7	764	18·3
1896	42,294	1246	29·6	171	137	753	17·8	123	36		717	16·9
1897	42,930	1324	30·8	178	134	811	18·8	142	42		769	17·9
1898	43,566	1311	30·0	240	183	935	21·4	133	39		896	20·5
1899	44,202	1300	29·4	188	145	818	18·5	128	36		782	17·6
1900	44,838	1354	30·1	182	134	807	17·9	135	35		772	17·2
1901	45,478	1246	27·3	161	129	810	17·8	113	39		771	16·9
1902	46,078	1245	27·0	146	117	856	18·5	180	56		813	17·6
1903	46,500	1322	28·4	157	118	781	17·4	105	39		781	16·7
1904	47,350	1278	26·9	195	152	933	19·7	176	63		877	18·5
Averages for years 1895-1904.	44,489	1293	29·0	180	139	829	18·6	135	41	...	794	17·8
1905	47,920	1168	24·3	163	139	783	16·3	150	37	13	759	15·8

\* Rates calculated per 1,000 of estimated population.

TABLE VI.

Vital Statistics of separate Localities in 1905 and previous years.

NAMES OF LOCALITIES.	1—WHOLE DISTRICT.				2—ST. MARY'S SUB-DISTRICT.				3—ST. CUTHBERT'S SUB-DISTRICT.			
YEAR.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1895	41,658	1,311	794	186	24,700	734	453	100	16,958	577	341	86
1896	42,294	1,246	753	171	24,876	706	440	103	17,418	540	313	68
1897	42,930	1,324	811	178	25,052	742	485	100	17,878	582	326	78
1898	43,566	1,311	935	240	25,228	742	546	138	18,338	569	389	102
1899	44,202	1,300	818	188	25,404	694	492	105	18,798	606	326	83
1900	44,838	1,354	807	182	25,580	731	429	80	19,258	623	378	102
1901	45,478	1,246	810	161	25,756	679	502	100	19,722	567	308	61
1902	46,078	1,245	813	146	26,274	723	486	72	19,804	522	327	74
1903	46,500	1,322	781	157	26,534	738	460	97	19,966	584	321	60
1904	47,350	1,278	933	195	26,984	701	537	111	20,366	577	396	84
Averages of Years 1895 to 1904	44,489	1,293	825	180	25,638	719	483	100	18,850	574	342	79
1905	47,920	1,168	783	163	27,277	648	450	81	20,643	520	333	82



TABLE VII.

Cases of Infectious Diseases notified during the year 1905.

NOTIFIABLE DISEASES	Cases notified in whole District.							Total Cases notified in each Locality.		No of Cases removed to Hospital from each Locality.	
	At all ages.	At Ages—Years.						St. Mary Sub- District.	St. Cuthbert Sub-District.	St. Mary Sub- District.	St. Cuthbert Sub-District.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.				
Small Pox...	...	...	...	...	...	...	...	..	...	...	..
Cholera ...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	25	...	6	12	3	4	...	16	9	8	6
Membranous Croup	...	...	...	...	...	...	...	...	...	...	...
Erysipelas...	73	Ages not ascertained.						44	29	...	..
Scarlet Fever ...	378	6	104	230	21	17	...	207	171	118	95
Typhus Fever ...	16	...	...	6	5	5	...	15	1	15	1
Enteric Fever ...	7	...	...	1	2	3	1	4	3	3	3
Relapsing Fever ...	...	...	...	..	...	...	..	...	...	..	...
Continued Fever ...	...	...	...	...	...	...	...	..	...	..	.
Puerperal Fever ...	4	...	...	...	2	2	..	3	1	...	..
Plague ...	...	...	...	...	..	...	...	...	...	...	...
Totals ...	503	...	...	...	...	...	...	289	214	144	105



TABLE IX.  
THE CARLISLE URBAN DISTRICT.  
INFANTILE MORTALITY DURING THE YEAR 1905.  
Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	Certified ...	21	1	2	4	28	7	8	6	5	5	9	1	4	4	...	4	81
	Uncertified ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Infectious Diseases.	Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria: Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoeal Diseases.	Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhoea, all forms	...	...	...	...	...	2	...	...	...	1	...	...	...	1	...	...	4
	Enteritis (not Tuberculous)	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	2
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	2	1	3	...	...	...	...	...	...	...	6
Wasting Diseases.	Premature Birth	12	...	1	...	13	2	...	...	...	...	...	...	...	...	...	...	15
	Congenital Defects	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	Injury at Birth	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	Want of Breast-milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases.	Atrophy, Debility, Marasmus	1	...	...	1	2	...	1	1	...	...	...	...	...	...	...	...	4
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	3
	Tuberculous Peritonitis: Tabes Mesenterica	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	3
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2
	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	1	1	1	1	...	...	1	...	...	...	...	...	...	4
	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
	Convulsions	1	...	...	...	1	...	...	...	1	...	2	...	...	...	...	...	4
	Bronchitis	...	...	1	...	1	...	2	1	1	2	1	...	1	...	...	...	9
Other Causes	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	...	2	...	1	4	...	...	2	...	2	11
	Suffocation, over-laying	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	Other Causes	6	1	...	1	8	...	...	...	...	...	...	...	1	...	...	...	9
		21	1	2	4	28	7	8	6	5	5	9	1	4	4	...	4	81

District (or sub-division) of St. Mary.

 Births in the year { Legitimate, 614.  
                           { Illegitimate, 34.

Deaths from all Causes at all Ages, 450.

Population.

 Estimated to middle of 1905.  
 27,277.



TABLE IX.—continued.  
THE CARLISLE URBAN DISTRICT.  
INFANTILE MORTALITY DURING THE YEAR 1905.  
Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes	{ Certified ...	14	5	5	...	24	13	3	8	9	3	5	5	6	1	5	...	82
	{ Uncertified ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Infectious Diseases.	{ Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Chicken-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Diphtheria : Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoeal Diseases.	{ Whooping Cough ...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	4
	{ Diarrhoea, all forms ...	...	...	...	...	...	1	...	4	...	...	1	2	...	...	2	...	10
	{ Enteritis (not Tuberculous) }	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	2
	{ Gastritis, Gastro-intestinal Catarrh }	...	...	...	...	...	...	...	...	2	1	1	...	...	...	...	...	4
	{ Premature Birth ...	6	1	3	...	10	1	...	1	...	...	...	...	...	...	...	...	12
Wasting Diseases.	{ Congenital Defects ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	{ Injury at Birth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Want of Breast-milk ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Atrophy, Debility, Marasmus }	1	1	...	...	2	2	...	1	2	...	1	1	...	...	1	...	10
	{ Tuberculous Meningitis }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Tuberculous Diseases.	{ Tuberculous Peritonitis : Tabes Mesenterica }	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	{ Other Tuberculous Diseases }	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
	{ Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Syphilis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Rickets ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Other Causes	{ Meningitis (not Tuberculous) }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Convulsions ...	1	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	4
	{ Bronchitis ...	1	1	1	...	3	2	1	2	2	...	1	1	1	...	1	...	14
	{ Laryngitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Pneumonia ...	...	...	1	...	1	1	1	...	1	...	1	...	...	...	...	...	5
Other Causes	{ Suffocation, over-laying }	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
	{ Other Causes ...	5	1	...	...	6	2	1	...	...	1	...	1	...	...	...	...	11
		14	5	5	...	24	13	3	8	9	3	5	5	6	1	5	...	82

District (or sub-division) of St. Cuthbert.	Population.
Births in the year { Legitimate, 491.	Estimated to middle of 1905,
{ Illegitimate, 29.	20,643.
Deaths from all Causes at all Ages, 333.	



TABLE X.

Mortality from Diarrhœa and Typhoid Fever--1874--1905.

Year.	DEATHS FROM DIARRHŒA.															Deaths from Typhoid Fever.
	Autumn Quarter. No. Registered.	Rate per-1000 of population	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	
1874	35	1.50	2	2	...	...	1	1	6	20	9	6	...	3	50	23
1875	27	1.30	2	...	...	...	2	4	5	12	10	2	...	2	44	24
1876	12	1.10	3	1	3	3	...	...	2	5	5	1	6	7	37	10
1877	10	.84	2	1	2	1	2	2	2	6	2	1	3	4	28	5
1878	26	1.10	1	2	1	1	3	3	9	8	9	1	1	1	40	11
1879	4	.34	2	1	1	1	...	2	2	2	...	...	1	...	12	11
1880	31	1.20	...	...	5	...	...	...	3	7	21	5	...	...	42	15
1881	7	.50	...	2	...	2	...	...	2	2	3	3	...	2	18	7
1882	17	.55	...	1	...	...	...	1	5	7	5	1	...	...	20	9
1883	8	.45	...	2	...	...	...	...	...	3	5	6	1	...	17	8
1884	14	.61	...	...	...	1	1	1	...	3	4	3	1	...	23	7
1885	4	.26	1	1	1	...	...	1	2	2	...	...	1	1	10	1
1886	8	.60	1	2	...	...	...	2	1	1	6	7	1	2	23	6
1887	7	.36	1	...	1	...	...	2	...	5	2	1	...	...	14	17
1888	8	.33	1	...	1	...	...	...	...	3	5	1	...	1	13	8
1889	6	.27	2	1	...	...	...	...	...	5	1	1	...	1	11	1
1890	16	.54	...	...	2	...	1	...	1	7	8	1	1	1	22	2
1891	5	.22	1	...	...	...	...	1	1	2	2	2	...	...	9	2
1892	2	.10	1	...	...	...	...	2	...	...	2	1	...	...	4	3
1893	9	.49	...	2	...	2	...	...	...	2	7	1	2	...	20	5
1894	1	.09	...	1	...	...	...	...	...	...	1	1	2	...	4	2
1895	3	.24	2	1	...	...	...	...	1	...	2	3	...	...	10	4
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
1897	4	.21	...	...	2	1	...	...	1	...	3	2	...	...	9	3
1898	16	.57	...	...	2	...	1	1	1	4	11	2	1	1	24	2
1899	10	.25	...	...	...	...	...	...	...	...	7	1	...	...	11	1
1900	7	.53	...	...	...	1	...	4	1	3	3	8	...	...	23	2
1901	11	.43	2	3	...	...	...	1	1	5	5	3	...	...	20	5
1902	1	.04	...	...	...	...	...	1	1	...	...	...	1	...	2	7
1903	1	.06	...	...	1	...	...	1	...	...	...	...	...	...	3	3
1904	7	.33	...	...	...	...	...	1	...	...	1	...	...	...	16	3
1905	10	.39	3	...	...	...	2	...	...	5	5	2	1	3	19	3





















TABLE XII.  
LOCALITIES OF DEATHS FROM PRINCIPAL  
ZYMOTIC DISEASES.

LOCALITY.	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Diarrhoea
<i>St. Mary Sub-District—</i>								
Duke Street .. ..	...	...	...	...	...	...	...	1
Fever Hospital ...	...	...	2	3	...	5	2	...
Constable Street ...	...	...	...	...	1	...	...	1
Junction Street ...	...	...	...	1	...	...	...	...
Milbourne Street ...	...	1	...	...	...	...	...	...
Drovers Lane ...	...	1	...	...	...	...	...	...
The Castle ...	...	1	...	...	...	...	...	...
Warwick Street ..	...	1	...	...	...	...	...	...
Rickergate .	...	1	...	1	...	...	...	...
Randall Street ...	...	1	...	...	...	...	...	...
Cumberland Street ...	...	1	...	...	...	...	...	...
Shaddongate ...	...	...	...	...	1	...	...	...
Bread Street ...	...	1	...	...	...	...	...	...
Port Road ..	...	...	...	...	...	...	...	1
Norfolk Street, East	...	...	...	...	...	...	...	1
Charlotte Street ...	...	...	...	1	...	...	...	...
Rigg Street ...	...	...	...	...	...	...	...	2
Peter Street ...	...	...	...	...	...	...	...	1
Nelson Street ...	...	...	...	...	...	...	1	...
Murrell Hill ..	...	...	1	...	...	...	...	...
Harvey Street ...	...	...	1	...	...	...	...	...
<i>St. Cuthbert Sub-District—</i>								
South Street ...	...	2	...	...	...	...	...	...
South John Street...	...	1	...	...	...	...	...	3
Botchergate ...	...	1	...	...	...	...	...	...
Thomson Street ...	...	1	...	...	1	...	...	...
Nicholson Street ...	...	...	...	...	1	...	...	...
English Damside ...	...	1	...	...	...	...	...	...
Greystone Road ...	...	1	...	...	...	...	...	...
Howe Street ...	...	...	...	...	1	...	...	...
Sybil Street ...	...	2	...	...	...	...	...	...
Hewson Street ...	...	...	...	...	1	...	...	...
Wood Street ...	...	...	...	...	...	...	...	1
Linton Street ...	...	...	...	...	1	...	...	...
London Road ...	...	...	...	...	1	...	...	...
Princess Street ...	...	...	...	...	1	...	...	...
Grey Street ...	...	...	...	...	1	...	...	...
Collier Lane ...	...	...	...	...	...	...	...	1
King's Arms Lane ...	...	...	...	...	...	...	...	1
Water Street ...	...	...	...	...	...	...	...	2
Brook Street ...	...	...	1	...	...	...	...	1
East Street ..	...	...	...	...	...	...	...	2
Old Greystone ...	...	...	...	...	...	...	...	1
Bowman Street ..	...	...	...	...	1	...	...	...
Totals ..	...	17	5	6	11	5	3	19

TABLE XIII.  
RAINFALL  
Collated by Mr. Walter Veitch, Curator, Cemetery, Carlisle.

MONTHS.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905.	
											Average for 10 years 1895-1904.	Number of days on which Rain fell.
January	in. 2.24	in. 1.92	in. .94	in. 2.58	in. 4.62	in. 2.58	in. 2.02	in. 2.40	in. 4.34	in. 2.18	in. 2.58	16
February	... .78	1.54	2.16	2.73	1.66	3.82	1.08	1.04	5.00	2.24	2.20	18
March	... 2.68	4.24	3.92	.94	1.60	.44	1.84	2.36	3.76	2.54	2.43	21
April	... 1.48	2.30	1.42	3.44	2.58	2.44	2.28	1.58	2.06	2.36	2.19	19
May	... .64	.58	1.50	2.98	3.00	1.94	2.02	2.48	2.76	2.62	2.05	12
June	... 1.64	3.54	3.48	2.38	1.18	6.58	1.76	1.66	1.60	1.86	2.56	4
July	... 5.78	3.44	1.68	1.06	3.80	1.60	1.26	2.46	4.80	1.84	2.77	14
August	... 5.54	2.08	4.46	4.04	1.80	5.60	4.40	2.50	4.90	3.54	3.88	21
September	... 1.28	4.08	4.40	1.64	3.68	1.98	.98	1.62	3.76	1.14	2.45	17
October	... 4.04	4.48	2.00	3.68	2.28	4.74	4.18	2.94	9.54	1.54	3.94	12
November	... 3.16	1.26	3.78	3.10	3.22	3.70	3.64	1.28	2.58	2.60	2.83	16
December	... 3.08	3.54	3.70	3.44	1.76	4.14	3.74	3.20	2.14	2.26	3.10	12
Totals ...	32.34	33.00	33.44	32.01	31.18	39.56	29.20	25.52	47.24	26.72	32.98	182
Total number of days on which Rain fell	191	197	188	204	187	218	187	216	236	198	202.2	

HEALTH DEPARTMENT,  
FISHER STREET,  
10th January, 1906.

VETERINARY INSPECTOR'S ANNUAL REPORT.

---

To the Chairman and Members of the Health Committee.

Gentlemen,

I have the honour of submitting to you my Seventh Annual Report, showing the work done by me during the year 1905.

One hundred and sixty-two newly-purchased cows have been examined, of these 156 were found to be free from disease. Of the remainder three were affected with nodular enlargement of the udder, one fœtid abscess in udder, one inflammation of the udder, due to overstocking. The milk of one animal on microscopical examination was found to contain leucocytes. All these six animals were returned to the sellers.

Three thousand nine hundred and seventy-six examinations have been made to ascertain the presence of diseases likely to affect the milk secretion. In addition to the cases mentioned above, the following diseases, likely to affect the milk supply, were discovered among the regular occupants of the byres, viz.:—Three cases of gastric derangement, two of milk fever, two of inflammation of the brain, one of congestion of the lungs, three inflammation of the udder, and one paralysis. The latter



case being incurable I advised the owner to have the animal destroyed. The milk from all the above animals was destroyed until they were free from disease.

At the request of the Medical Officer of Health and Chief Sanitary Inspector I made the following post-mortem examinations at the Public Slaughterhouses, viz.:—Three beasts, three sheep, and three pigs. I certified all except the carcasses of the three pigs to be unfit for human food.

The Auction Marts have been regularly visited each Monday, 13,423 pigs having been inspected. Four pigs were found in the Auction Marts to be suffering from skin eruptions, due to over-feeding. I drew the attention of the manager of the Auction Mart to the condition of the animals, and advised that they should not be sold. My reason for stopping the sale was that had the pigs been slaughtered their flesh would have been unfit for human food.

At Whitsuntide and Martinmas I examined horses belonging to the showmen. They were found to be free from contagious disease, but a number were badly affected with mange.

The horses belonging to the Corporation stud number nineteen, including two animals used for Fire Brigade purposes.

I am pleased to report that during the year the stud has been free from any serious illness.

I am, Gentlemen,

Your obedient Servant,

R. CRAIG ROBINSON, M.R.C.V.S.,

Veterinary Inspector.

